The Maryland Fruit Grower

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Edited by the Secretary, A. F. Vierheller, Extension Horticulturist

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RAIL SHIPMENTS

A letter dated July 28th, from E. H. Bugress, Chairman, Traffic Executive, Association-Eastern Territory, to shippers and receivers of freight, reads as follows:

"Because of the extraordinary demands of the Government for war transportation, the railroads operating in Official Classification Territory hereby notify all shippers and receivers of freight that transportation schedules heretofore published or advertised are hereby withdrawn,

"Henceforth, these railroads, pursuant to Section 2 (a) of the terms and conditions of the domestic Uniform Bill of Lading, will use their best efforts to transport all shipments with reasonable dispatch under the conditions prevailing at the time of movement. They cannot, however, assume liability for failure to maintain the regularity of services heretofore prevailing or to conform to schedules previously published and now withdrawn.

"This notice, which I am informed is similar to notices recently given by the railroads in the West and South, is necessitated by the heavy and complex requirements of the Government for rail service in connection with our all-out war effort. In such a time all will agree that the first duty of the railroads is to the Government. Shippers and receivers, of course, fully realize this, and I have every confidence in their willingness to accept, in a spirit of co-operation, such changes in the transportation schedules of these railroads as are due to these abnormal times and conditions."

NEW FRUITS

Stark Bros., Louisiana, Missouri, announce the New Fruits Contest from June 1 to November 15. Any one having a new fruit worth entering should write Stark Brothers for entry blank.

ESSENTIAL OCCUPATIONS

Draft boards have received a list of 34 essential occupations in which a man must be working before he can be *considered* for draft deferment. The first 6 essential occupations, with classifications, breakdowns, etc., are: (1) Production of aircraft; (2) production of ships; (3) production of ordnance; (4) production of ammunition; (5) argiculture (including fruit farmers, horticultural services, essential assembly and marketing services); (6) food processing (including canned and dried fruits and fruit juices). Among these agricultural items are included transportation services and warehousing of perishables.

BORER CONTROL

Mr. and Mrs. Peach Borer (Sannina exitiosa is the name) are now flying around, getting ready to lay eggs and leave their kids on the doorstep of many unsuspecting peach trees. The eggs are usually laid on the peach tree trunk, at or near the ground surface, and the little worms that hatch out begin boring into the tree bark. That is the reason for using borer treatments in September, as the worms are very small at that time, and are more easily controlled. If not controlled, the worms simply work around under the bark, becoming larger and larger until by spring, they are good sized. They continue eating until about June or July, then spin up a cocoon near the tree base, and emerge during July as clear-winged moths, much resembling wasps, except that they have larger bodies. During August the breeding and egg-laying are done. The life-history shows us the benefits of fall treatments and the possible failure to control the insect or prevent damage when spring treatment is done. The entomologists recommend application of treatment about September 15-30 for Western Maryland and October 1-15 for Eastern Shore, especially when para-di-chloro-benzene crystals are used, as the soil temperature must be warm enough to volatilize the crystals into gas. The ethylene dichloride liquid or oil-PDB crystal mixture may be applied in cooler weather.

The grower has several choices of materials. The older method of using PDB crystals is still good. In applying it, clean trash and weeds about 15 inches away from tree base, trying not to break soil crust too much. Then in a circle around the tree, about 3 inches from tree base, apply the crystals. Very large trees may receive 1½ ounces of crystals; average-sized bearing trees should receive one ounce of crystals; trees 4 to 5 years, ¾ ounce, and trees 1 to 3 years ½ ounce or less. After applying crystals, place several shovelsful of soil around the tree base, covering the crystals and pat the mound down with the back of the shovel. On 1 to 3 year trees, the mounds should be pulled down in about 2 weeks, but the mounds on older trees should be removed the next spring. The precautions are: not to remove too much soil from tree base when preparing to use crystals. The gas from the crystals is heavier than air, and will not kill above where it is applied. Also, be sure to remove mounds in spring or early summer, as the moths lay eggs at ground level, and they will lay eggs high on the tree if mounds are there when eggs are laid.

The use of PDB crystals emulsified in a suitable oil and applied as a diluted liquid is also a good one. Its advantage is that it may be applied with a dipper or as a spray. It has advantages on rough stony land. It penetrates and is safe, if used properly. One Maryland grower recently stated that he preferred to make it weaker than necessary and apply a little more. This material may be bought ready-mixed for dilution with water. It is sold as Para-Scalecide, Boretox, etc. Mound soil about trees after using this material.

The recent use of ethylene dichloride has caused considerable confusion. It injured or killed trees, but later check-up indicated winter-injury had caused some of the bad results. If used properly, this material seems safe, but it is not being too highly recommended unless care is used. Do *not* pour it on tree trunks. Mix it carefully. Keep it stirred well. Seal all soil cracks about the tree and apply the liquid to the soil around the tree base and mound it up.

Supplement to Maryland Fruit Grower's News-Letter - August 1942.

Orchard Labor

Considerable work has been done in trying to line up some orchard labor for the apple picking season, but many efforts have led to a dead end. Following Governor O'Conor's appropriation of $5000.00 for importation of labor from the South, some colored labor was brought in to the Eastern Shore fields, but not until a lot of legal tangles were unsnarled. This took time, and in the meantime, the local labor on the Shore was organized, and the harvest was accomplished in rather good shape. The Governor's appropriation must be matched by the counties in which the money is used. It is understood that some of these funds are still available for use in Western Maryland.

Housing is a big problem, where adult labor is imported. There has been talk of using high school boys and girls for apple harvest, but there are plenty of problems in connection with this procedure. Before schools can be closed the authorities must be certain of the necessity of such procedure, and they must know exactly how much labor is needed. Transportation and distribution of pupils to orchards must be arranged either by school bus or growers' trucks. Then there is supervision. Teachers may be used, but at foreman's wages. Sanitary facilities must be established. Safe drinking water must be provided. Child labor must not be exploited. Apple picking is hard work, and there are lots of children that can't do it.

The whole question of using high school labor is a county affair, and schools will not be closed unless all possible sources of labor have been investigated. County road laborers, W.P.A., prison labor, conscientious objectors, relief rolls, etc., must be thoroughly canvassed before school labor is considered. There is a lot of work being done quietly by State Farm Labor Committee of Maryland, and if, and when any new developments occur, growers will be notified immediately. In the meantime, every grower should be considering any possible source of harvest labor.

Warning

Appalachian Apple Bulletin No. 58, July 28, 1942, gives a complete review of the favorable factors in this year's apple deal, along with some of the unfavorable aspects. The last paragraph reads:"Not in years have so many favorable factors been lined up behind the apple and peach deals - <u>as things stand today</u>. But - the picture's rosy tints are reflections from the lurid fires of WAR. The picture, hence, is the very apex of uncertainty. Cold gray ashes always follows flames; whose only value is to fertilize; to start life over again. The grower who sticks his head into cloud dreams of quick wealth, and steps his spending up accordingly, will meet the same fate that blasted those who did this in 1918 and 1919. Growers will probably need every cent that they can get from their fruit -- not for luxuries, but for taxes, for essentials, and for operating costs in the years ahead. War profits have a habit of being phony profits; except to the wisest."

Last Call

Before the apple harvest gets started, be sure to check over all picking and packing equipment. Broken ladders and field crates, defective picking bags or buckets will need repair or replacement. Check the grading machinery for lubrication, worn parts, and spots where fruit may be bruised. Repair orchard roads where ruts will shake up loads of fruit. Use lots of padding where fruit is dumped on the grader. Orchard products are up near top place in foods necessary in the war. Bruised fruit cuts the efficiency of production. "Mauled" fruit may prove to be a "knock-out" to profits.

Attacking the Nitrogen Shortage Problem

Horticultural research and extension workers of The Virginia, Pennsylvania, and Maryland, met in Gettysburg, Pa., August 19th, and set up a suggested list of orchar procedure to offset the lack of available nitrogen fertilizer during the coming year The supply will be cut at least 25%, according to present prospects. The proposed suggestions will be sent to growers in the near future.

Canner Apples, Government Purchases, etc.

At a conference in Martinsburg, W. Va., on August 17th, called by National Apple Institute and Appalachian Apple Service, a representative group of canners and growers discussed their mutual problems. This was the first meeting of canners and growers in this section.

Mr. W. G. Meal, Chief, Fresh Fruits and Vegetables Division, Agricultural Marketing Administration, stated that mature Grimes 2¼, 2½, and 2½ up would be purchased, beginning early September for school lunches. Jonathan would be purchased, if necessary. No price was set. Market price will prevail. The main object will be to offset any soft spots in the market.

Mr. Myer, of War Production Board, warned growers of many problems of shortage of materials in the future, and stressed saving of every apple down to cider grade.

Mr. M. E. Knouse of Pennsylvania spoke for canners stating that they would be in the market for 2½ up Grimes, and would need about 90 to 100% of last year's total tonnage. Dried apples will be in heavy demand, also. The growers, through a resolution passed by National Apple Planning Committee, had set a proposed 25 to 35% increase in price to offset increased costs, depending upon region. Canners' costs are also up. A committee of 3 canners and 3 growers was appointed to work together and to consult with Government officials regarding prices for the Cumberland-Shenandoah Region.

Canners stated that they will accept up to 10% worms and worm holes, grading these out at the plant. Stock running over 10% will be rejected. Growers should run check samples before shipping, and re-grade, if necessary. Rots are OUT. Pure Foods and Drugs Laws will be enforced. In Pennsylvania, the No. 2 Canners allowing 25% waste will be cut to 15%, according to the canners.

Orchard Labor

A conference on Orchard Labor, called by State Farm Labor Committee, was held in Hagerstown, Maryland, August 19th, but the report is not yet complete for publication. Representative growers and Federal employment officials were present, and there were some fairly bright spots in the picture. There was indication that growers in the region have been on the job of scouring all sources of labor. A report of the meeting will be given in next month's news-letter. In the meantime, growers should be looking into every prospect of securing labor.

A. F. Vierheller
Extension Horticulturist
University of Maryland
College Park, Maryland.

Dr. O. I. Snapp of Fort Valley, (Georgia) Laboratory, and Dr. F. P. Cullinan of U. S. Horticultural Station, Beltsville(Maryland) conducted many trials of the right and wrong ways of using Ethylene Dichloride. In a field plot at Beltsville on April 28, 1942, many trees were examined, and Dr. Snapp wrote of the results: "The danger of tree injury was considerably greater when the material was poured *on the tree trunk,* this injury increasing somewhat as the water content of the soil increased. In other words, there was considerably less injury from even *twice* the recommended DOSAGE poured *on the ground* than from the recommended DOSAGE poured *on the trunk.* Likewise, *twice* the recommended STRENGTH poured on the *ground* was safer than the *standard* STRENGTH poured on the *trunk.* When recommended strength and dosage was applied in the approved manner on the soil irrespective of wet or dry soil, no injury occurred. Trees in silt loam were used in the trials, as injury from excessive dosage or improper application seems to cause injury on such soils."

Some growers say that PDB crystals have lost their effect in control. Others say that PDB liquid won't work. Others are "off" ethylene dichloride. Yet there are many growers using all these materials with almost perfect control. Let's check up on our methods. Certainly there are too many good peach trees in Maryland orchards showing serious borer injury. And just as certainly, the control situation won't improve unless we do a better job in applying the control materials.

APPLE PLANNING COMMITTEE

The National Apple Planning Committee met in Buffalo, N. Y., August 10-11, in connection with International Apple Association convention. Mr. J. A. Cohill represented Maryland. The important news of this meeting will be sent to growers in future news-letters.

HARVEST SPRAYS

Harvest sprays to hold fruit on the trees will soon be in order. Those who have used this material know that it is not a cure-all, and must be used with caution and judgment. Beginners should read directions carefully. Harvest spray is sold by many commercial companies under various trade-names. The main thing to remember is that it does not always work perfectly, varying with weather, season, and variety. Also, do not use it to hold fruit on the tree too long, and remember that after its effect is gone, (10 days to 2 weeks) there will likely be heavy and sudden fruit drop. The material has shown that it is practical and has many advantages.

IN THE MAIL

After unavoidable delay, the Proceedings of The Forty-Fourth Annual Meeting of The Maryland State Horticultural Society at Hagerstown, last January, have been mailed to paid-up members. Since errors may occur, any members who paid up but did not receive the Proceedings, should write A. F. Vierheller, College Park, Maryland. Also, some placards urging careful handling of fruit (for use in packing houses) have been mailed to many growers. There is a limited supply but a few more of these placards are still available.

Have you read the advertisements?

MOUSE CONTROL

We will be noticing some mouse injury from now on, and it would be well to make some mental notes regarding location and extent of such injury. Placing of poison bait for mouse control is best done about mid-October to mid-November. Zinc phosphide bait, prepared by Division of Rodent and Predator Control, U. S. Fish and Wild Life Service, may be obtained from John Hamlet, University of Maryland, College Park, Maryland. The bait comes in shaker-top cans, each can containing enough powder to prepare 10 quarts of apple-cube bait. Each quart contains about 100 apple cubes. The bail sells for 10c a can. General directions for using the bait are sent with the order.

SPRAY DRUMS

Growers having empty steel drums are urged to return them to manufacturers. There is a shortage of materials for making new drums. If they cannot be returned promptly, store them where they will not get banged up or rusted out. Drums should be kept under cover, drained out as soon as practicable, screw fittings not misplaced, and when taking material from them, do not spike them, but remove plugs.

Mr. A. H. Nofsinger, Cockeysville, Maryland (Alta Orchards) has a large quantity of plain white paper apple wraps, 10 x 10 inches, which may be purchased at a bargain. Write, if interested.

NITROGEN FERTILIZER

The War Production Board has issued an official request to manufacturers and dealers in nitrogen fertilizer, that no nitrogen fertilizer be sold for use in seeding fall grain crops. This does not apply to vegetable crops. This means that nitrogen fertilizers may not be used in seeding of fall cover crops or for direct tree application.

Remember our advertisers

THE IDARED APPLE

The Idared apple is a cross between Jonathan and Wagener, developed at Idaho Experiment Station. Somewhat larger than either parent, it is of intermediate shape between the two. Color is nearly solid bright red; flesh creamy white, crisp, tender and juicy; core unusually small. It retains its shape in baking, as well as Rome, and is of superior flavor to Rome. Not especially susceptible to fire blight, and not subject to Jonathan Spot. In common storage it is said to be sound and of good eating quality until April. The tree is moderately vigorous and bears early. No restrictions are placed on its propagation or sale. It would be well to wait until its performance is tested under Eastern conditions before plantings are made. This is merely a report and not a recommendation of the variety.

Joe left college because of poor eye-sight. He mistook the Dean of Women for a co-ed and tried to date her.

When Mr. J. A. Swing says, "I have not had a single penny's repair cost on my Iron Age sprayer," he means every word of it. For Mr. Swing thinks this is a fine recommendation for any machine that gets the hard usage he gives it spraying eighty odd acres of orchard on his 140-acre farm near Winchester, Va.

Mr. Swing has a skid type sprayer with a 400-gallon tank and a 20-23 gallon high pressure Victory pump To him, one of the particularly pleasing Iron Age features is the screen which keeps residue from clogging up the spray gun. "I am well satisfied with my Iron Age," he says.

Mr. Swing is not alone in his feelings about the service and dependability of Iron Age sprayers. Growers everywhere praise the cost-cutting performance of Iron Age . . . their crop's best insurance.

Long life, slow speed Victory is horizontally designed for working pressures up to 1000 lbs. per sq. inch . . . its high pressure atomization makes every drop of insecticide count. Built in seven sizes—6 to 40 gallons-per-minute capacities.

A. B. Farquhar Co., Limited

4426 DUKE ST. **YORK, PA.**

ECHOES OF THE PAST

The first commercial peach orchard in Maryland was planted by Mr. Cassidy, a Philadelphia grain merchant who came to Cecil County in 1838, purchased a large tract of poor land and set out 50,000 peach trees. He improved the land and is reported to have made considerable money. About 1842, Philip Reybold of Delaware City, planted a large peach block in Kent County. Much peach planting was done from 1856 to 1865. In 1856, Edward Wilkins began planting peaches and in a few years had 1500 acres in cultivation. During the next 9 years, heavy peach planting occurred along the water fronts of Kent, Cecil, and Queen Anne's Counties, the fruit being hauled out by boat. There was "a continual forest of peach trees all along the water courses, and extending from 1 to 2 miles back from the water." In the interior part, planting was not done until 1867-1875 at which time the Delaware Railroad came in, with county branch lines, and peach orchards were planted all along these railroads. The varieties included Early York, Yellow Rare-Ripe, Red Rare-Ripe, Old Mixon Cling, Morris White, Malecatone, Ward's Late and Heath Cling. Troth's Red came in about 1840, then Crawford's Late and Smock Free about 1844, followed by Old Mixon Free and Stump of the World about 1858 to 1860. Crawford's Early appeared in 1860, Reeve's Favorite in 1862, and Hale's Early Mountain Rose in 1865. The ripening seasons were not continuous, so markets were bare at times, and prices fluctuated. Plantings increased up to 1875, and in a few years after that "When it was discovered that the rugged mountain soil of Western Maryland afforded a congenial situs for the peach, the industry received a remarkable impetus and orchards sprung into existence as if by magic throughout the mountain region of the State." Baltimore had a large peach canning industry. An average of approximately 587,862 baskets and boxes of peaches were received annually in Baltimore from 1887 to 1897. There were packing and grading problems in those days, too. One Baltimore canner in 1898 stated, " . . . peaches, in fact all fruits and vegetables sent to market should be carefully sized and separated, not packed indiscriminately as is too often done by the careless farmer. Put your goods in marketable shape, nice boxes or baskets, as the case may be, of uniform size and shape, holding a definite measure, so the buyer, as well as the commission merchant, can give a fair valuation of the products offered for sale. In this way you will get the full value of your goods."

QUESTIONS

What percentage of Transparent apples went to market as large-sized fruit that brought a good price? How much tree breakage occurred in the peach orchard? Were the peaches of as large size as usual for the variety? Disappointing answers have been found in some orchards. Labor shortage has interfered with pruning and thinning operations, and any shortcomings have shown their effects in the crop, here and there. Some growers, however, are not convinced that heavier thinning is important. For Transparent apples, heavy thinning is *essential,* if we want to hit that early market with sizeable fruit. Knowing from careful research work, that at least 50 leaves are necessary for supporting an apple and about 30 leaves will nourish a peach, it is simple arithmetic to figure that less fruits allow the leaves to do a better job for the fruits left on the tree Less tree breakage, larger fruits, better color,

and flavor are results of thinning. Early thinning is best, but many growers were still doggedly thinning apples in early August, to prevent breakage, cull off bad stuff, and to give the fruits a chance to fill out to size. A rather gloomy darkey sat in jail and sadly remarked, "I believe in bein' honest, 'cause I've tried both." Any grower who has been fortunate in getting his thinning done properly can really feel that he prefers to thin his fruit because he has tried other methods that somehow didn't seem to give the correct results.

APPLES AND VITAMINS

Now that the apple harvest is on, it is interesting to know what is in those apples that we are taking off our trees. In July, 1941, Hoosier Horticulture, published by Indiana Horticultural Society, we read the following by Dr. Ira Manville, University of Oregan Medical School:

"Apples contain 110 international units of vitamin A per 100 grams of edible substance. An average apple would provide 220 units of vitamin a day, or if two were eaten, 440 units. 4,000 units are recommended for an adult's daily consumption. Thus this fruit alone will supply one-ninth of the needs for this vitamin. This vitamin *MUST* be supplied in modern warfare to prevent night-blindness.

"Apples contain 120 I. U. of vitamin C or 240 per one good-sized apple. It is recommended that the adult have 1,000 units of this vitamin daily. Thus 2 apples per day will supply half the requirements of this vitamin. Scurvy is always a menace among large groups being fed on a ration basis. Vitamin C is important in overcoming toxins.

"Apples will contribute to the vitamin B and G intake."

A BIT OF McINTOSH HISTORY

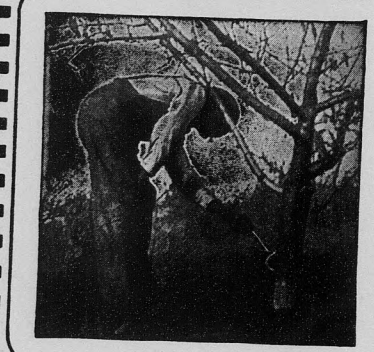
All Massachusetts fruit growers should be interested in facts about the early history of the McIntosh. Recent correspondence with members of the McIntosh family gives some interesting information. The original tree was found by John McIntosh (born August 15, 1777, near Schenectady, N. Y.) not in 1794 as generally believed, but sometime after 1811, the year when he took possession of the farm in Dundas County, Ontario. The tree was injured by the burning of the nearby dwelling in 1894. The tree bore its last apples in 1908, died shortly afterwards and finally was removed in 1910 by a great grandson of John McIntosh, whose house burned in 1925, and with it burned the last work of the original McIntosh tree. It is interesting to know that there are now trees near the place of origin which are believed to have been propagated from the original tree, all bear apples of the blushed type.

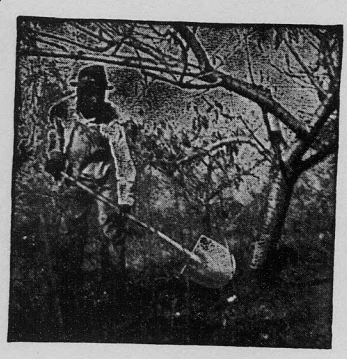
J. K. SHAW Mass. Agricultural Experiment Station

HERE'S NEWS

North and South Dakota Horticulture reports that for each pound that certain weeds gain in weight, they use about 100 gallons of water. A sunflower uses about 54 gallons for its entire growth, and a tomato only 34 gallons. A ton of mixed weeds uses 18 lbs. of nitrogen, while a ton of sorrel uses 28 lbs. and mustard uses 75 lbs. Briefly, 1 pound of plant food is consumed by each 3 pounds of weeds. A dozen weeds allowed to mature can rob their flowering neighbors of more than a year's supply of food. (From Science in the Garden.)

Controlling PEACH BORER with PARA-SCALECIDE





Para-Scalecide has been used for 10 years on millions of peach trees, both young and old, without a single report of injury.

●

Over a period of years, Para-Scalecide has clearly demonstrated its superiority in peach borer control. It requires less labor than the old crystal method, it is more certain, and is the safest method in common use today.

Dilute Para-Scalecide 1 to 7 parts of water. Pour or spray it against the base of the tree, allowing the material to run down into the ground. Promptly throw a few shovelfuls of earth against the base of the tree to hold the fumes, and no further attention is necessary.

The best time to do this is in the Fall after the crop is picked and before cold weather sets in. As it is not necessary to remove the mounds when using Para-Scalecide, a part of the material remains dormant in the soil to become active in the Spring. If the Fall application is missed, successful application is also made in the Spring.

Trees of all ages are treated. One gallon of Para-Scalecide treats 40 to 50 full grown peach trees.

Use Para-Scalecide and be sure. Write for new folder "Controlling Peach Borer", with full information and prices.

B. G. Pratt Company

Manufacturers of Scalecide, Spra-Cream, Straitar, D-X, etc.

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